

AUTOMATED BOUNDARY-SCAN CHAIN COMPOSITION METHOD USING A
DEVICE DATABASE AND ACCESS MECHANISM FOR STORING AND
RETRIEVING SITUATION-DEPENDENT OPERATION OPTIONS

ABSTRACT

A method for programming a series of in-system programmable devices that uses Boundary-Scan techniques to read device identification codes from each device of a system, and to automatically generate a board/device information file including a record for each device arranged in the order in which the devices are chained in the system. The device identification codes are then used to automatically retrieve device specifications from a central database. When no identification code is provided from the device, or the database fails to include specifications for a particular device, the user is prompted to enter minimum information or specifications necessary to carry out communications with the device. After device specifications are entered for each device, the user is prompted to enter configuration data, which is automatically matched to its associated device, and compared for consistency with the device specifications. After verifying the configuration data, programming is performed using the configuration data.